

Vitamin A (retinol) and vitamin E (α -tocopherol) belong to the fat soluble class of vitamins. In contrast to water soluble vitamins, an excessive administration may lead to hypervitaminosis. Vitamin A deficiency is the leading cause of preventable blindness in children and raises the risk of disease and death from severe infections. Vitamin E is an important antioxidant and is thought to have a role in preventing atherosclerosis by inhibiting oxidation of low-density lipoprotein (LDL). The RECIPE ClinRep[®] Complete Kit allows for the simultaneous analysis of both vitamins within a run time of 8 min. For quality assurance, reference materials with excellent stability are available.



Vitamin Status

Vitamin A and E in Plasma

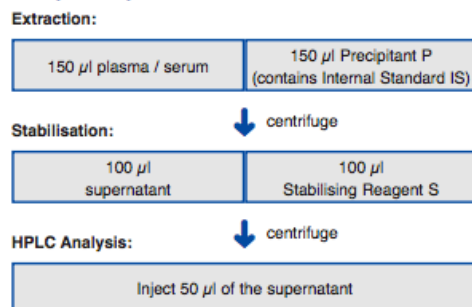
Test Data

| | |
|-----------------------|--|
| Linearity: | Vitamin A: 0.02 - 5.0 mg/l, Vitamin E: 0.40 - 50 mg/l |
| Recovery: | 92 - 98 % |
| LOD: | Vitamin A: 0.01 mg/l, Vitamin E: 0.30 mg/l |
| LLOQ: | Vitamin A: 0.02 mg/l, Vitamin E: 0.40 mg/l |
| Intraassay precision: | Vitamin A: 1.4 %, Vitamin E: 1.4 % |
| Interassay precision: | Vitamin A: 5.0 %, Vitamin E: 3.2 % |

HPLC Parameters

| | |
|---------------------|--|
| Pump: | isocratic pump, flow rate: 1.5 ml/min |
| Injection volume: | 50 μ l |
| Injection interval: | 8 min |
| UV-Detector: | 325 / 295 nm |
| HPLC-Thermostat: | 30 °C |

Sample Preparation

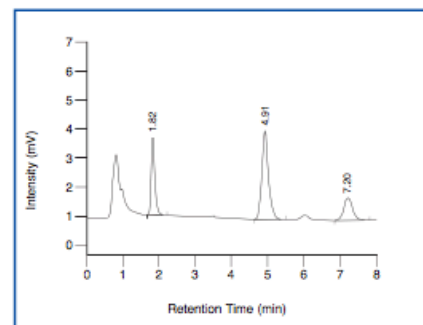


→ Quick sample preparation

→ Injection interval: 8 min

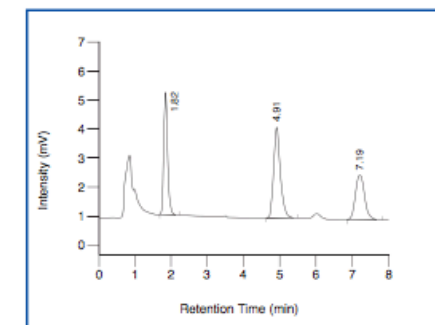
→ Reference materials with excellent stability available

ClinChek[®] Serum Control, Level I



Vitamin A: 1.82 min, IS: 4.91 min, Vitamin E: 7.20 min

ClinChek[®] Serum Control, Level II



Vitamin A: 1.82 min, IS: 4.91 min, Vitamin E: 7.19 min

Ordering Information

| Order No. | Description | Quantity |
|--|--|-------------------------|
| 22000 | ClinRep [®] Complete Kit for Vitamin A and E in Plasma for 100 assays | 1 pce. |
| Kit components (order no. 22000): | | |
| 22010 | Mobile Phase | 1000 ml |
| 22011 | Standard Solution | 3 ml |
| 22012 | Precipitant P with Internal Standard | 15 ml |
| 22013 | Serum Calibrator, lyophil. | 3 ml |
| 22020 | Sample Preparation Vials with Reagent, lyophil. | 2 x 22020 (2 x 50 pcs.) |
| 22021 | Reaction Vials | 100 pcs. |
| 22022 | Stabilising Reagent S | 10 ml |
| | Manual | 1 pce. |
| | Quick Reference | 1 pce. |
| Start Accessories: | | |
| 22030 | Analytical Column with test chromatogram | 1 pce. |
| FK7000 | manu-CART [®] cartridgeholder, one time accessory | 1 set |
| Accessories: | | |
| FK5810 | PEEK tubing (connection of prefilter and column) | 1 pce. |
| FK5820 | Stainless steel prefilter holder | 1 pce. |
| FK5821 | Replacement filter for stainless steel prefilter holder | 10 pcs. |
| ClinChek[®] Controls: | | |
| 8870 | Serum Control, lyophil., Level I | 10 x 5 ml |
| 8871 | Serum Control, lyophil., Level II | 10 x 5 ml |
| 8872 | Serum Control, lyophil., Level III | 10 x 5 ml |
| 8873 | Serum Control, lyophil., Level I, II, III | 3 x 3 x 5 ml |